

Message

From: Shuster, Kenneth [Shuster.Kenneth@epa.gov]
Sent: 5/3/2016 5:47:12 PM
To: Gerhard, Sasha [Gerhard.Sasha@epa.gov]; Galbraith, Michael [Galbraith.Michael@epa.gov]; Gaines, Jeff [Gaines.Jeff@epa.gov]; Abdul-Malik, Norma [Abdul-Malik.Norma@epa.gov]; Brown, Ernie [Brown.Ernie@epa.gov]; Crosby-Vega, Terri [Crosby-Vega.Terri@epa.gov]; Kohler, Amanda [Kohler.Amanda@epa.gov]
CC: Sasseville, Sonya [Sasseville.Sonya@epa.gov]; Guernica, Mimi [Guernica.Mimi@epa.gov]
Subject: FW: Umatilla demil facility

FYI

From: Craig, Harry
Sent: Tuesday, May 03, 2016 1:23 PM
To: Hendrickson, Charles ; Vazquez, Julio
Cc: Maddox, Doug ; Shuster, Kenneth ; Dixon, Chelsea ; Gullett, Brian
Subject: FW: Umatilla demil facility

F.Y.I. - The Canadian Dept. of National Defense scientists and engineers are interested in seeing how OB/OD unit remediation is done in the U.S. I may send them your way as well, I think Ft. Wingate and Seneca AD are good examples as well as Umatilla AD of the challenges of investigation and remediation on these type of historical OB/OD units.
Harry

From: STU.THOW@forces.gc.ca [<mailto:STU.THOW@forces.gc.ca>]
Sent: Tuesday, May 03, 2016 9:49 AM
To: Craig, Harry <Craig.Harry@epa.gov>; Sonia.Thiboutot@drdc-rddc.gc.ca
Cc: DANA.PANTEA@forces.gc.ca; Steven.Whitwell@forces.gc.ca; RANJEET.GUPTA@forces.gc.ca
Subject: RE: Umatilla demil facility

Craig

I am very interested in seeing this operation and seeing the pros and cons of such an endeavour. There has been repeated discussion on a lift and sift process for legacy sites (FUDS) in Canada, yet we have no real project data or experience with this process.

I might have some environmental engineers that may be interested in the finding of this remediation project as well.

Stu Thow

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From: Craig, Harry [<mailto:Craig.Harry@epa.gov>]
Sent: May-03-16 12:40 PM
To: Thiboutot, Sonia
Cc: Pantea D@ADM(Mat) DLEPS@Ottawa-Hull; [Whitwell SW@ADM\(Mat\)](mailto:Whitwell SW@ADM(Mat)) DAEME@Ottawa-Hull; [Thow SA@ADM\(IE\)](mailto:Thow SA@ADM(IE))
DCLSPD@Ottawa-Hull
Subject: RE: Umatilla demil facility

Sonia,

To clarify, this is a remediation of a closed OB/OD unit at Umatilla, the base is being transferred to the Oregon National Guard, and to the surrounding counties.

Unfortunately, there is not lots of high tech here, the investigation used a towed array magnetometer and towed array EM-61 for geophysical investigation of 1750 acres. There were 50,000 individual anomalies identified and 355 acres of saturated geophysics. The Army will need to "dig and sieve" about 500,000 to 1 million cubic yards of soil to sift for removal of ordnance down to 20 mm projectile size in the saturated areas up to a depth of about 20 feet bgs. Based on the investigation of the 50,000 anomalies, 600 intact munitions items have been recovered from kick out of OD operations.

Some historical U.S. Army documents state that OB/OD is an inexpensive method of treatment, however that completely ignores the cost of investigation and remediation at the end of the life of an OB/OD unit. This cleanup will probably be in the range of about \$50 million, some of the other historical OB/OD units at other Army depots such as Ft. Wingate in NM will likely exceed \$100 million.

Hopefully this gives you a little useful background on Umatilla. There was also historical lead contamination at the site from rotary kiln popping furnaces run in the 1960's without air pollution control, and groundwater contamination from steam out/melt out operations where explosives contaminated wastewater was discharged untreated into unlined lagoons, resulting in about a 300 acre groundwater plume of TNT, TNB, RDX, and HMX. Soil remediation (composting) has been completed, and there is a current operational pump and treat system running for groundwater. The Army ERDC folks have done some in-situ bioremediation studies on aerobic and anaerobic treatment of RDX in groundwater under ESTCP funding, and we will likely be changing the remedy to add bioremediation as a treatment option for groundwater as well. These remediation projects may be of interest to you as well.

Regards,

Harry

From: Thiboutot, Sonia [<mailto:Sonia.Thiboutot@drdc-rddc.gc.ca>]

Sent: Tuesday, May 03, 2016 5:54 AM

To: Craig, Harry <Craig.Harry@epa.gov>

Cc: 'DANA.PANTEA@forces.gc.ca' <DANA.PANTEA@forces.gc.ca>; 'Steven.Whitwell@forces.gc.ca' <Steven.Whitwell@forces.gc.ca>; STU.THOW@forces.gc.ca

Subject: RE: Umatilla demil facility

Hello Harry,

We have another person interested in seeing the particulars of this project and the capabilities of the OB/OD unit.

Mr. Thow is from the UXO Centre of Expertise from ADM(IE) .

We will wait for further info.

Sonia Thiboutot, Ph.D.

Scientifique de la défense, DGSTOC, Centre de recherches de Valcartier

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From: Thiboutot, Sonia

Sent: April-26-16 8:29 AM

To: 'Craig, Harry'; 'Steven.Whitwell@forces.gc.ca'

Cc: 'DANA.PANTEA@forces.gc.ca'

Subject: Umatilla demil facility

Hello Harry,

Steve Whitwell from my HQ and involved in demil would be interested. Can you tell us which process will be trialed for the cleanup ?

Thanks for offering !

Sonia

From: Thiboutot, Sonia

Sent: Wednesday, April 20, 2016 1:03 PM

To: Craig, Harry

Subject: RE: international team working

Thank you very much ! No worry with the delay ! I think some of us would like to see the OB/OD unit. I will come back to you on this.

Sonia Thiboutot, Ph.D.

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From: Craig, Harry [<mailto:Craig.Harry@epa.gov>]

Sent: April-20-16 12:04 PM

To: Thiboutot, Sonia

Cc: DANA.PANTEA@forces.gc.ca

Subject: RE: international team working

Sonia,

Sorry about the delay, here are my rankings. Let me know if you have any questions.

We have a large scale OB/OD unit (1750 acres) cleanup starting at Umatilla Army Depot in Oregon this year, let me know if any of your colleagues are interested in seeing the particulars.

Regards,

Harry